Chambers-Clover Management Plan Project Updated as of May 2001

Identification of Studies/Plans Pertinent to WRIA 12

A Catalog of Washington Streams and Salmon Utilization, Volume 1, Puget Sound. 1975. Washington State Department of Fisheries.

A Comprehensive Water Supply Study and Plan for Pierce County and Vicinity. 1969. Prepared by Water Division, Department of Public Works.

American Lake Phase I Restoration Project, Final Report and Technical Appendices. February 1993. KCM, Inc. Prepared for the Tacoma-Pierce County Health Department.

American Lake Watershed Management Plan. 1998. Woodward-Clyde. Prepared for Pierce County Public Works and Utilities Environmental Services.

American Lake Watershed Phosphorus Source Evaluation. April 1997. Woodward-Clyde. Prepared for Pierce County Public Works and Utilities Environmental Services.

An Evaluation of Groundwater Quality for the Chambers Creek/Clover Creek Drainage Basin, Pierce County. September 1980. Prepared by Littler, J.D. and J.T. Aden. Washington State Department of Social and Health Services.

An Indicator Study of the Clover Creek Watershed. May 2000. Environmental Methods of Investigations Class. Pacific Lutheran University.

Aquatic Plant Technical Assistance Implementation Plan – 1995 Field Season. (95-334). 1995. Washington State Department of Ecology.

BMP Data Sheets for all WRIAs. Washington State Department of Transportation.

Boise Cascade-Steilacoom Evaluation of Bottom Study Data Re: Memo September 28, 1971. Memo to Jim Knudson (71-e22). 1971. Washington State Department of Ecology.

Central Puget Sound Regional Water Supply Outlook, Technical Memoranda and Progress Report. February 2000. Prepared by the Puget Sound Water Supplier's Forum, R.W. Beck, Economic and Engineering Services, Inc., and Daily Environmental.

Chambers-Clover Basin Instream Flow Resources Protection Program, Including Proposed Administrative Rules. 1979. Washington State Department of Ecology.

Chambers-Clover Watershed Draft Initial Assessment. March 1995. Science Applications International Corporation, Shapiro and Associates, Taylor Associates, and Environmental Systems Research Institute in partnership with the Washington State Department of Ecology.

Chambers-Creek Basin Water Quality Management Plan. 1974. Kennedy Engineers. Prepared for Pierce County.

Chambers Creek-Clover Creek Basin Sewage General Plan, Pierce County, Washington. 1969. September 1969. Kennedy Engineers.

Chambers Creek Monitoring Program, Memo to Ron Pine (72-e15). 1972. Washington State Department of Ecology.

Chambers Creek Wastewater Treatment Plant Class II Inspection, February 17-18, 1987, Ecology Report (87-e32). 1987. Washington State Department of Ecology.

Chambers Creek Wastewater Treatment Plant Receiving Water Study, Ecology Report (87-e06). 1987. Washington State Department of Ecology.

Chambers Creek U.L.I.D. 73-1, Environmental Impact Statement, Volume 1. September 1975. Pierce County Public Works.

Chambers-Clover Creek Watershed Management Committee, Final Draft Watershed Action Plan. A Water Quality Plan for Reducing Nonpoint Pollution. March 1996. Pierce County Public Works and Utilities.

Chambers-Clover Creek Watershed Management Committee: Preliminary Draft Watershed Characterization. 1994. Pierce County Public Works and Utilities.

Clover/Chambers Creek Aquifer Petition for Sole Source Designation. 1988. Molly Adolfson Consulting and Sweet Edwards/EMCON, Inc. Prepared for the Tacoma-Pierce County Health Department.

Clover/Chambers Creek Basin Geohydrologic Study. 1985. Brown and Caldwell, Inc. Prepared for the Tacoma-Pierce County Health Department.

Clover/Chambers Creek Basin Ground Water Management Program. 1991. Brown and Caldwell, Inc. Prepared for the Tacoma-Pierce County Health Department.

Clover-Chambers Creek Basin Ground Water Management Program Implementation Project, Final Report. October 1995. EMCON, Inc. Prepared for the Tacoma-Pierce County Health Department.

Clover/Chambers Creek Septic System Monitoring Project, Interim Report. March 1992. University of Washington College of Forest Resources and the Tacoma-Pierce County Health Department.

Clover/Chambers Creek Basin, Septic/Biomat Monitoring Project Final Report. June 1994.

University of Washington College of Forest Resources and the Tacoma-Pierce County Health Department.

Clover Creek Basin Characterization Report, Volume I: Report and Volume 2: Appendices 2000. KCM/Tetra Tech. Prepared for Pierce County Public Works and Utilities Water Programs.

Clover Creek Basin Study- Potential Projects. April 1994. KCM, Inc. Report prepared for Pierce County Storm Drainage and Surface Water Management Utility.

Clover Creek: Citizen Actions Overflow County Government. 1994. Kondrat, R.G.

Copper in Sediments from Steilacoom Lake, Pierce County, Washington (92-e00). June 1992. Prepared by Bennett, J. and J. Cubbage. Washington State Department of Ecology.

Copper in Steilacoom Lake, Memo to Steve Saunders April 4, 1990 (90-e11). 1990. Washington State Department of Ecology.

Diquat Concentrations in the Steilacoom Lake Outlet (Chambers Creek) Following Reward Applications During 1997 (98-322). 1998. Washington State Department of Ecology.

Draft Environmental Impact Statement for Chambers Creek Sewage System (ULID 73-1), Project # C-530565-01), Pierce County, Washington. September 1975. Prepared by Wilsey & Ham, Inc. in cooperation with the Environmental Protection Agency, Region X.

Estimated Baseflow Characteristics of Selected Washington Rivers and Streams, Water Supply Bulletin No. 60 (99-327). October 1999. Prepared by Sinclair, K.A. and C.F. Pitz. Washington State Department of Ecology.

Flett Creek Water Quality Survey, Memo to Jim Krull (74-e89). 1974. Washington State Department of Ecology.

Flood Insurance Study for Pierce County, Washington, Volumes 1 and 2. August 1987. Federal Emergency Management Agency.

Fredrickson Industrial Park, Pierce County, Washington, RI/FS Work Plan. February 1998. Conestoga-Rovers & Associates.

Freshwater Ambient Monitoring Report for Wateryear 1991 (93-75). 1993. Washington State Department of Ecology.

Ground-Water Flooding in Glacial Terrain in Southern Puget Sound, Washington. USGS Fact Sheet 111-00. September 2000. Prepared by Jones, M., J. Joseph, and T. Olsen. United States Geological Survey.

Ground-Water Hydrology of The Tacoma-Puyallup Area, Pierce County, Washington, Water Resources Investigation Report 99-4013. 1999. Prepared by Jones, M.A., L.A. Orr, J.C. Ebbert, and S.S. Sumioka. United States Geological Survey. Prepared in cooperation with the Washington State Department of Ecology, the Tacoma-Pierce County Health Department, the City of Puyallup, and the City of Tacoma.

Groundwater Monitoring Program for Multiple Sites, McChord Air Force Base, Final CY 1997 Annual Report. September 1998. McChord Air Force Base.

Groundwater Monitoring Program for Multiple Sites, McChord Air Force Base, Final CY 1998 Annual Report. August 1999. McChord Air Force Base.

Groundwater Monitoring Program for Multiple Sites, McChord Air Force Base, Final CY 1999 Annual Report. January 2001. McChord Air Force Base.

Groundwater Treatment System Monitoring Project, Area D/American Lake Garden Tract, McChord Air Force Base, Final CY 1997 Annual Report. September 1998. McChord Air Force Base

Groundwater Treatment System Monitoring Project, Area D/American Lake Garden Tract, McChord Air Force Base, Final CY 1998 Annual Report. August 1999. McChord Air Force Base.

Ground Water Quality and Land Use Study for a Model Area in the Clover Creek Basin, Pierce County, Washington. 1995. Robinson & Noble, Inc. Prepared for the Tacoma-Pierce County Health Department.

Intermittent Flow on Clover Creek: Causes and Possible Solutions. 1986. Prepared by Sinclair, J. and R. Carter. Washington State Department of Ecology.

Jct. Kapowsin Highway Vicinity Hydraulic Report, MP 13.15 Vicinity (Hwy 161). Washington State Department of Transportation.

Lake Water Quality Assessment Project, 1989 (91-60). November 1991. Prepared by Rector, J. and D. Hallock. Washington State Department of Ecology.

Lake Water Quality Assessment Project, 1990 (92-124). January 1993. Prepared by Rector, J. and D. Hallock. Washington State Department of Ecology.

Lake Water Quality Assessment Program, 1991-1992 (94-46). April 1994. Prepared by Rector, J. Washington State Department of Ecology.

Lake Water Quality Assessment Program, 1993 (96-304). January 1996. Prepared by Rector, J. Washington State Department of Ecology.

Lakewood/Plaza Cleaners Long-Term Monitoring Round I (91-e34). 1991. Washington State Department of Ecology.

Lakewood/Plaza Cleaners Long-Term Monitoring Round II (91-e35). 1991. Washington State Department of Ecology.

Lakewood/Plaza Cleaners Long-Term Monitoring Round III, November 12-13, 1991 (92-e43). 1992. Washington State Department of Ecology.

Lakewood/Plaza Cleaners Long-Term Monitoring Round IV, May 27-28, 1992 (92-e44). 1992. Washington State Department of Ecology.

Lakewood/Plaza Cleaners Long-Term Monitoring Round VI, May 3-4, 1993 (93-e39). 1993. Washington State Department of Ecology.

Lakewood/Plaza Cleaners, Round VII, December 1-2, 1993 (94-e30). 1994. Washington State Department of Ecology.

Lakewood/Plaza Cleaners, Round VIII, April 18-20, 1994 (94-e31). 1994. Washington State Department of Ecology.

Lakewood/Plaza Cleaners Round IX, November 8-9, 1994 (95-340). 1995. Washington State Department of Ecology.

Lakewood/Plaza Cleaners, July 11,12, and 14, 1995 (95-359). 1995. Washington State Department of Ecology.

Lakewood/Plaza Cleaners, January 1996 (96-317). 1996. Washington State Department of Ecology.

Lakewood/Plaza Cleaners, July 1996 (97-312). 1997. Washington State Department of Ecology.

Lakewood/Plaza Cleaners, January 9, 1997 (97-324a). 1997. Washington State Department of Ecology.

Lakewood/Plaza Cleaners, July 23-34, 1997 (97-339). 1997. Washington State Department of Ecology.

Lakewood/Plaza Cleaners, February 2, 1998 (98-325). 1998. Washington State Department of Ecology.

Lakewood Plaza Cleaners, January and August 2000, Groundwater Monitoring Sampling Results (00-03-046). November 2000. Prepared by Marti, P.B. Washington State Department of Ecology.

Mobility and Safety Project Hydraulic Report (Hwy 161). Washington State Department of Transportation.

MP 119 Vicinity- Interim Modifications Hydraulic Report. Washington State Department of Transportation.

Nisqually Watershed Hydraulic Report, MP 40 to MP 42.5. Washington State Department of Transportation.

North Fork Clover Creek Basin Preliminary Design Report for Surface Water Control (Project No. D-303 and D-304). October 1993. David Evans and Associates, Inc.

North Fork Clover Creek Dam Failure Analysis Technical Memorandum. April 1998. KCM Inc. Prepared for the Pierce County Storm Drainage and Surface Water Management Utility.

Numerical Model Analysis of the Effects of Ground-Water Withdrawals on Discharge to Streams and Springs in Small Basins Typical of the Puget Sound Lowland, Washington, Water Supply Paper 2492. 1999. By Morgan, D.S. and J.L. Jones. United States Geological Survey.

Pacific Avenue (SR 507 to SR 512) Hydraulic Report. Washington State Department of Transportation.

Pacific Lutheran University Sewage Treatment Plant Facilities. Memo to Mike Pierce, Ron Robinson (73-e46). 1973. Washington State Department of Ecology.

Persistence and Drift of Aquatic Herbicide Diquat Following Application at Steilacoom and Gravelly Lakes (97-301). 1997. Washington State Department of Ecology.

Persistence and Drift of the Herbicide Endothall Following Applications at Lakeland Village and Gravelly Lakes, Washington (93-e51). May 1993. Prepared by Serdar, D. and A. Johnson. Washington State Department of Ecology.

Pierce County Chambers Creek Properties Water Rights Development Analysis. October 1994. Economic and Engineering Services, Inc. and Robinson & Noble, Inc. Prepared for Pierce County Public Works and Utilities Water Programs.

Pierce County Coordinated Water System Plan Regional Supplement and Water General Plan. 1988. Pierce County.

Pierce County Coordinated Water System Plan and Regional Supplement. 1995. Pierce County Public Works and Utilities Water Programs.

Pierce County Coordinated Water System Plan Water Demand Update Project, Draft Methodology and Background Report. September 1999. Pierce County Public Works Utilities Water Programs.

Pierce County Line to Military Road Hydraulic Report, MP 139.15 to MP 144.70. Washington State Department of Transportation.

Pierce County Storm Drainage and Surface Water Management Master Plan. 1991. James M. Montgomery, Consulting Engineers. Prepared for Pierce County Public Works Surface Water Management.

Pilot Evaluation, Subsurface Stormwater Disposal Facilities, Clover/Chambers Basin Interim Report. September 1991. Adolfson Associates, Inc., Brown and Caldwell Consultants, and Sweet-Edwards/EMCON, Inc. Prepared for the Tacoma-Pierce County Health Department and Pierce County Public Works Surface Water Management.

Port of Tacoma Rd Interchange to King County Line HOV Lanes Hydraulic Report, MP 136.09 to 139.24. Washington State Department of Transportation.

Port of Tacoma Interchange to Pierce County Line HOV Lanes & Surveillance Control & Driver Information Hydraulic Report, MP 136.09 to 139.13. Washington State Department of Transportation.

Puget Gulch Management Plan. 1999. City of Tacoma and Metro Parks.

Puget Gulch Stream Survey. 1995?. City of Tacoma and the Puyallup Tribe of Indians.

Recharge From Precipitation in Three Small Glacial-Till-Mantled Catchments in the Puget Sound Lowland, Washington, Report 96-4219. 1997. United States Geological Survey.

Report of 1995 Ground Water Studies South Tacoma Aquifer System. 1998. AGI Technologies. Prepared for the City of Tacoma Water Division.

Results of Monitoring Metals in Chambers-Clover Creek Drainage, Memo to Bob Duffy, SWRO (96-e08). 1996. Washington State Department of Ecology.

Results of Pesticide/PCB Monitoring in Chambers/Clover Creek Drainage, Memorandum to Bob Duffy, SWRO (96-e07). 1996. Washington State Department of Ecology.

River and Stream Ambient Monitoring Report for Wateryear 1993, Final Report (94-158). 1994. Washington State Department of Ecology.

River and Stream Ambient Monitoring Report for Wateryear 1996 (98-317). 1998. Washington State Department of Ecology.

Sediment Quality Evaluation Steilacoom Lake, Pierce County, Washington. January 1994. Hart Crowser. Prepared for the Lake Steilacoom Improvement Club.

Snake Lake Water Quality Investigation, Memo to Bob Ramsey June 9, 1983 (83-e41). 1983. Washington State Department of Ecology.

South Dupont Interchange Hydraulic Report, I-5. Washington State Department of Transportation.

Sprague to Snake Lake Hydraulic Report, MP 0.72 to MP 1.57 Hwy 16. Washington State Department of Transportation.

SR 512/SR 7 Interchange Safety Improvements Hydraulic Report, MP 2.22. Washington State Department of Transportation.

SR 516 to Pierce County Line HOV and Truck Climbing Lanes Hydraulic Report MP 139.5 to MP 148.7. Washington State Department of Transportation.

SR 705 Pedestrian Overpass Hydraulic Report. Washington State Department of Transportation.

Standard Methodology for Conducting Watershed Analysis, Version 2.0. October 1993. Washington Forest Practices Board.

Steilacoom Lake Phase 1 Quality Assurance Plan. May 1994. KCM, Inc. Prepared for the Tacoma-Pierce County Health Department.

Steilacoom Lake Phase 1 Restoration Project, Final Report, Volume 1- Study Report and Volume 2- Appendices. July 1996. KCM, Inc. Prepared for the Tacoma-Pierce County Health Department.

Steilacoom Lake Phase 1 Restoration Project, Water Quality Assessment and Watershed Characterization (Review Draft). May 1995. Adolfson Associates, Inc. Prepared for KCM, Inc. and the Tacoma-Pierce County Health Department.

Steilacoom Lake Phase 1 Restoration Study Draft Final Report and Appendices. November 1995. KCM, Inc. Prepared for the Tacoma-Pierce County Health Department.

Steilacoom \Lake Restoration Draft Hydrogeologic Evaluation, Pierce County, Washington. June 1995. HongWest & Associates. Prepared for KCM, Inc. and the Tacoma-Pierce County Health Department.

Steilacoom STP Class II and Receiving Water Study, February 1-4, 1982. Memo to Ken Mauerman (82-e14). 1982. Washington State Department of Ecology.

Strategies for the Protection of Groundwater in Pierce County. September 1985. Tacoma-Pierce County Health Department.

Stormwater Evaluation, Clover/Chambers Crrek Basin Ground Water Management Program. October 1989. Adolfson Assocaties, Inc. Prepared for the Tacoma-Pierce County Health Department.

Summit-Waller Community Plan, A Portion of the Pierce County Comprehensive Plan. November 1988. Pierce County Planning Commission.

Support Document for Sole Source Aquifer Designation of the Central Pierce County Aquifer System. 1993. United States Environmental Protection Agency.

Surface- and Ground Water Conditions During 1959-61 in a Part of Flett Creek Basin, Tacoma, Washington. 1966. Prepared by Veatch, F.M., G.E. Kimmel, and E.A. Johnson. United States Geological Survey.

Surface-Water Hydrology and Runoff Simulations for Three Basins in Pierce County, Washington, Report 95-4068. 1996. Report prepared by Mastin, M. United States Geological Survey.

Surface-Water Quality Assessment of the Clover Creek Basin, Pierce County, Washington, 1991-92, Report 95-4181. 1996. Prepared by McCarthy, K. United States Geological Survey.

Surface Water Quality in Chambers Creek/Clover Creek Drainage Basin, November 1980-January 1981. Memo to Rick Pierce (81-e15). 1981. Washington State Department of Ecology.

Survey of Chemical Contaminants in Ten Washington Lakes (94-154). 1994. Washington State Department of Ecology.

Survey of Flett Creek. Memo to Jim Krull and Ron Robinson (74-e61). 1974. Washington State Department of Ecology.

Survey of Groundwater & Surface Water Quality for the Chambers Creek/Clover Creek Drainage Basin, Pierce County. 1981. Prepared by Littler, J.D., J.T. Aden, A.F. Johnson. Washington State Department of Social and Health Services.

Tacoma HOV Hydraulic Report (5 Volumes), I-5. Washington State Department of Transportation.

Tacoma Mall Vicinity Ramps/Drainage Hydraulic Report, MP 131.3 to MP 132.84 I-5. Washington State Department of Transportation.

Unified Sewer Plan for the Pierce County Wastewater Utility, Draft. 2000. Pierce County Public Works and Utilities.

Vail Road to Vicinity MP 31.00 Hydraulic Report, MP 30.52 to MP 30.89 SR 507. Washington

State Department of Transportation.

Watershed Approach to Water Quality Management, Needs Assessment for the South Puget Sound Watershed (95-64). June 1995. Prepared by Emmett, K. Washington State Department of Ecology.

Washington State Pesticide Monitoring Program, Pesticides and PCBs in Marine Mussels, 1995 (96-301). 1996. Washington State Department of Ecology.

Water Quality Assessments of Selected Lakes within Washington State, 1994 (97-307). February 1997. Prepared by Smith, A.K. and J. Rector. Washington State Department of Ecology.

Water Quality Survey of 25 "Citizen-Volunteer" Lakes from Washington State (90-e03). March 1990. Prepared by Brower, C. and W. Kendra. Washington State Department of Ecology.

Water Quality Survey on Flett Creek, July 30, 1979. Memo to Rick Pierce and Ron Robinson (79-e25). 1979. Washington State Department of Ecology.

1989 Lakes and Reservoir Water Quality Assessment Program: Survey of Chemical Contaminants in Ten Washington Lakes. May 1990. Prepared by Johnson, A. and D. Norton. Washington State Department of Ecology.

1994 Statewide Water Quality Assessment Lakes Chapter- Companion Document to Washington State's 305(b) Report (95-311). February 1995. Prepared by Rector, J. and D. Hallock. Washington State Department of Ecology.

1997 American Lake Survey: The Warmwater Fish Community Before Stocking Smallmouth Bass, Technical Report Number: FPT99-14. December 1999. Prepared by Mueller, K.W. and M.R. Downen. Washington State Department of Fish and Wildlife.

234th St. E. to 204th St. E., 204th St. E. to 176th St. E. Hydraulic Report, MP 17.42 to MP 21.58 (Hwy 161). Washington State Department of Transportation.

303(e) Water Quality Management Plan, Water Resources Inventory Area 10, 12, Puyallup-Chambers Basin. 1976. Washington State Department of Ecology.

Programs/Projects of Interest

Tacoma-Pierce County Health Department Long-Term Ground Water Monitoring Program

Pierce County Stream Team

Clover Creek Council

Group A Water System Wellhead Protection Programs

Group A Water System Plans

Lakewood Water District Plan, March 1998

Steilacoom Water Plan, November 1999

Parkland Light and Water Plan, 1994, draft 2000

Fircrest Plan, August 1991

South East Tacoma Mutual Plan, November 1994 (now part of Tacoma Water)

Spanaway Water Plan, August 1994

Southwood/Sound, Rainier View Plan, draft June 2000

Firgrove Mutual Plan, 1999

Summit Plan, January 1999

Dupont Plan, April 1997

Fort Lewis Plan, 1997

McChord Air Force Base Plan, March 1997

Tacoma Water Division Plan, 2000

Pierce County Water Programs: Basin Plans, NPDES Permit, and CWSP Implementation

Community Plans

Washington State Gap Analysis Project (GAP)

Growth Management Act (GMA) Comprehensive Plan Update Process

ESHB2514 (Watershed Management Act) Project for the Nisqually Watershed (WRIA 11)

ESHB2496 (Salmon Recovery Act) Project for WRIAs 10 and 12

Pierce County Response to the Endangered Species Act Listing of Chinook Salmon

Limiting Factors Analysis

The Ecosystem Diagnosis and Treatment (EDT) Analysis for WRIA 12

Central Puget Sound Water Supplier's Forum

Comprehensive Sewer Plan

Chambers-Clover Creek Watershed Implementation (400-12 WAC)

Fort Lewis Environmental Activities

McChord AFB Environmental Activities

City of Tacoma Landfill Monitoring/Remediation